AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.   (Cancelled)

2.   (Withdrawn) A method of performing analysis upon data, said method comprising steps of:

receiving a set of data elements;

providing a hierarchical decision structure comprising one or more hierarchical levels, wherein each of said hierarchical levels corresponds to a particular result, and wherein each of said hierarchical levels includes one or more rules that can be compared to said set of data elements;

selecting one or more of said rules within each of said hierarchical levels;

selecting one or more numerical quantities, wherein each of said numerical quantities corresponds to one of said hierarchical levels, and wherein each of said numerical quantities corresponds to a number of the selected rules that must be met to indicate a result for a corresponding one of said hierarchical levels; and

for each of said hierarchical levels, performing the following steps:

i) comparing said set of data elements to each of said selected rules within the hierarchical level to determine a number of selected rules that are met within the hierarchical level;

ii) comparing said number of selected rules that are met to the numerical quantity corresponding to the hierarchical level; and

iii) indicating a result corresponding to the current hierarchical level when the number of selected rules that are met is greater than or equal to said numerical quantity corresponding to the hierarchical level.

3.   (Withdrawn) A method in accordance with claim 2, wherein said set of data elements include information derived from medical data.

4.   (Withdrawn) A method in accordance with claim 2, wherein a result corresponding to one of said hierarchical levels is a technical fail result.

5.   (Withdrawn) A method in accordance with claim 2, wherein a result corresponding to one of said hierarchical levels is a pass result.

6.   (Withdrawn) A method in accordance with claim 2, wherein a result corresponding to one of said hierarchical levels is a refer result.

7.   (Withdrawn) A method in accordance with claim 2, wherein the steps of selecting one or more of said rules and selecting one or more numerical quantities are performed by using a graphical user interface on a computer display device.

8.   (Withdrawn) A method in accordance with claim 2, further including a step of selecting one or more numerical values, wherein each of said numerical values corresponds to one of said plurality of selected rules, and wherein each of said numerical values indicates a value at which said corresponding one of said selected rules is met.

9.   (Withdrawn) A method in accordance with claim 8, wherein the step of selecting one or more numerical values is performed using a graphical user interface on a computer display device.

10.   (Withdrawn) A method in accordance with claim 2, wherein the step of indicating a result is performed by generating a written report.

11.   (Withdrawn) A computer readable medium having instructions executable by a computer recorded thereon, said instructions comprising:

a first set of instructions for defining a hierarchical decision structure comprising a

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plurality of hierarchical levels, each of said hierarchical levels corresponding to a particular result, and each of said hierarchical levels including one or more rules that can be applied in an analysis of said set of data elements;

a second set of instructions for allowing a user to select one or more of said rules within each of said plurality of hierarchical levels;

a third set of instructions for allowing a user to select one or more numerical quantities, each of said numerical quantities corresponding to a number of rules that must be met to indicate a result for a corresponding one of said hierarchical levels;

a fourth set of instructions for receiving data; and

a fifth set of instructions for performing, for each of said hierarchical levels, the following steps:

i) comparing said received data to each of said rules within the hierarchical level to determine a number of rules that are met within the hierarchical level;

ii) comparing said number of rules that are met to the numerical quantity corresponding to the hierarchical level; and

iii) indicating a result corresponding to the hierarchical level when the number of rules that are met is greater than or equal to said numerical quantity corresponding to the hierarchical level.

12.   (Withdrawn) A computer readable medium in accordance with claim 11, wherein a result corresponding to one of said hierarchical levels is a technical fail result.

13.   (Withdrawn) A computer readable medium in accordance with claim 11, wherein a result corresponding to one of said hierarchical levels is a pass result.

14.   (Withdrawn) A computer readable medium in accordance with claim 11, wherein a result corresponding to one of said hierarchical levels is a refer result.

15.   (Withdrawn) A computer readable medium in accordance with claim 11, further including a set of instructions for providing a graphical user interface on a computer display device.

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16.   (Withdrawn) A computer readable medium in accordance with claim 11, further including a set of instructions for selecting one or more numerical values, wherein each of said numerical values indicates a value at which a corresponding one of said selected rules is met.

17.   (Withdrawn) A computer readable medium in accordance with claim 11, further including instructions for generating a written report describing said result.

18.   (Currently Amended) A method of processing data representing results of a diagnostic or screening test, the method comprising the steps of:
        performing a first procedure to customize decision making criteria, said first procedure including the steps of:
                defining one or more features characteristic of a predetermined type of said data;
                defining a plurality of decision levels;
                defining, for each decision level, at least one rule based on at least one of said features; and
                defining, for each rule, a criteria; and
        performing a second procedure to process said data, said second procedure including the steps of:
                receiving said data of said predetermined type to be processed, said data having values corresponding to said features;
                comparing said values of said data with said rules according to said criteria; and
                outputting a conclusion based on said comparison, said conclusion comprising an indication of the outcome of the diagnostic or screening test.

19.   (Previously Presented) A method in accordance with claim 18, wherein said first procedure further comprises a step of designating, for each decision level, a quantity of rules effective to influence a result for that level.

20.　　(Previously Presented)　A method in accordance with claim 18, wherein said first procedure further comprises a step of designating, for each decision level, whether that level represents a condition selected from the group consisting of a technical fail condition, a necessary condition, a sufficient condition, a contributing condition and a refer condition, and

wherein said step of comparing said values with said rules according to said criteria includes performing a comparison of said values with said rules according to said criteria for each decision level, and

wherein, in said step of outputting a conclusion, the conclusion is output based on a combination of at least a comparison result for said necessary condition and a comparison result for said sufficient condition.

21.　　(Previously Presented)　A method in accordance with claim 20, wherein, in said step of outputting a conclusion, the conclusion is output based on a combination of at least a comparison result for said necessary condition, a comparison result for said sufficient condition, and a comparison result for said contributing condition.

22.　　(Previously Presented)　A method in accordance with claim 20, wherein said first procedure further comprises a step of designating, for each decision level, a quantity of rules effective to influence a result for that level.

23.　　(Previously Presented)　A method in accordance with claim 18, wherein:

said step of comparing said values with said rules according to said criteria includes performing a comparison of said values with said rules according to said criteria for each decision level, and

in said step of outputting a conclusion, the conclusion is output based on a combination of comparison results for at least two levels.

24.　　(Previously Presented)　A method in accordance with claim 18, wherein said step of comparing said values with said rules according to said criteria includes

performing a comparison of said values with said rules according to said criteria for each decision level.

25.   (Previously Presented) A software program including computer executable instructions stored on a computer readable medium, said software program comprising:

a first set of computer code that enables a user to customize decision making criteria, said first set of computer code including:

computer code that enables a user to define features characteristic of a predetermined type of data;

computer code that enables a user to define a plurality of decision levels;

computer code that enables a user to define for each decision level at least one rule based on at least one of said features; and

computer code that enables a user to define for each rule a criteria; and

a second set of computer code that enables the computer to process data, said second set of computer code including:

computer code that receives data of said predetermined type to be processed, said data having values corresponding to said features;

computer code that compares said values with said rules according to said criteria; and

computer code that outputs a conclusion based on said comparison.

26.   (Previously Presented) A software program in accordance with claim 25, wherein said first set of computer code further comprises computer code that enables a user to designate, for each decision level, a quantity of rules effective to influence a result for that level.

27.   (Previously Presented) A software program in accordance with claim 25, wherein said first set of computer code further comprises computer code that enables a user to designate, for each decision level, whether that level represents a condition selected from the group consisting of a technical fail condition, a necessary condition, a sufficient

condition, a contributing condition and a refer condition,

wherein said computer code that compares said values with said rules according to said criteria performs a comparison of said values with said rules according to said criteria for each decision level, and

wherein said computer code that outputs a conclusion does so based on a combination of at least a comparison result for said necessary condition and a comparison result for said sufficient condition.

28.   (Previously Presented) A software program in accordance with claim 27, wherein said computer code that outputs a conclusion does so based on a combination of at least a comparison result for said necessary condition, a comparison result for said sufficient condition, and a comparison result for said contributing condition.

29.   (Previously Presented) A software program in accordance with claim 27, wherein said first set of computer code further comprises computer code that enables a user to designate, for each decision level, a quantity of rules effective to influence a result for that level.

30.   (Previously Presented) A software program in accordance with claim 25, wherein:

said computer code that compares said values with said rules according to said criteria performs a comparison of said values with said rules according to said criteria for each decision level, and

said computer code that outputs a conclusion does so based on a combination of comparison results for at least two levels.

31.   (Previously Presented) A software program in accordance with claim 25, wherein said computer code that compares said values with said rules according to said criteria performs a comparison of said values with said rules according to said criteria for each decision level.

32.   (Withdrawn) A method of analyzing data comprising steps of:

allowing a user to customize decision-making criteria including steps of allowing the user to:

define one or more rules for use in evaluating data;

select any portion of said rules for defining a pass condition for an analysis of said data and assign a value to at least one of said rules for defining said pass condition; and

select any portion of said rules for defining a fail condition for an analysis of said data and assign a value to at least one of said rules for defining said fail condition; and

processing said data, said processing including:

comparing said data with the selected rules and any assigned values; and

providing an output yielding a pass or fail condition of the analysis.

33.   (Withdrawn) A method in accordance with claim 32, further comprising a step of requiring a minimum number of rules to be selected by the user for use in the analysis.

34.   (Withdrawn) A method in accordance with claim 32, wherein the step of customizing decision-making criteria defines a level, and wherein said process for customizing decision-making criteria further includes steps of:

presenting each said level for viewing by a user;

allowing the user to select at least one of said rules to be active in said analysis; and

allowing the user to enter a numerical value in association with at least one of said selected rules.

35.   (Withdrawn) Software stored on a computer readable medium, said software comprising:

a first set of instructions that enable a user to customize decision making criteria, said first set of instructions including instructions that enable a user to:

define one or more rules for use in evaluating data;

select any portion of said rules for defining a pass condition for an analysis of said data and assign a value to at least one of said rules for defining said pass condition; and

select any portion of said rules for defining a fail condition for an analysis of said data and assign a value to at least one of said rules for defining said fail condition; and

a second set of instructions that processes said data, said second set of instructions including instructions that compare said data with the selected rules and any assigned values, and provide an output yielding a pass or fail condition of the analysis.

36.   (Withdrawn) Software in accordance with claim 35, further including instructions for iteratively processing said sets of instructions.

37.   (Withdrawn) Software in accordance with claim 35, further including instructions for requiring a minimum number of rules to be selected by the user for use in the analysis.

38.   (Withdrawn) Software in accordance with claim 35, wherein the first set of instructions defines a level, and wherein said first set of instructions further includes:

instructions that present each said level for viewing by a user;

instructions that allow the user to select at least one of said rules to be active in said analysis; and

instructions that allow the user to enter a numerical value in association with at least one of said selected rules.

39.   (Withdrawn) Software in accordance with claim 35, further comprising instructions for printing out a report providing a result of said analysis.

40. (Currently Amended) A method of analyzing data comprising steps of:

enabling a user to customize decision making criteria by performing steps including:

defining features characteristic of a predetermined type of data representing results of a test;

defining one or more groups of settings, each of said groups of settings including:

a plurality of decision levels;

for each decision level, at least one rule based on at least one of said features; and

for each rule, a criteria; and

storing said groups of settings; and

processing the data by performing steps including:

enabling a user to select a stored group of settings of said stored groups of settings;

receiving data of said predetermined type to be processed, said data having values corresponding to said features;

based on said selected group of settings, comparing said values with said rules according to said criteria; and

outputting a conclusion based on said comparison, said conclusion including an indication of the outcome of the test.

41. (Previously Presented) A method in accordance with claim 40, wherein said step of enabling a user to customize decision making criteria further comprises a step of designating, for each decision level of each of said groups of settings, a quantity of rules effective to influence a result for that level.

42. (Previously Presented) A method in accordance with claim 40, wherein said step of enabling a user to customize decision making criteria further comprises a step of designating, for each decision level, whether that level represents a condition selected

from the group consisting of a technical fail condition, a necessary condition, a sufficient condition, a contributing condition and a refer condition,

wherein said step of comparing compares said values with said rules according to said criteria includes performing a comparison of said values with said rules according to said criteria for each decision level, and

wherein, in said step of outputting a conclusion, the conclusion is output based on a combination of at least a comparison result for said necessary condition and a comparison result for said sufficient condition.

43.   (Previously Presented) A method in accordance with claim 40,

wherein said step of comparing said values with said rules according to said criteria includes performing a comparison of said values with said rules according to said criteria for each decision level, and

wherein, in said step of outputting a conclusion, the conclusion is output based on a combination of comparison results for at least two levels.

44.   (Previously Presented) A method in accordance with claim 43, wherein said step of enabling a user to customize decision making criteria further comprises a step of designating, for each decision level, a quantity of rules effective to influence a result for that level.

45.   (Previously Presented) A software program including computer executable instructions stored on a computer readable medium, said program comprising:

a first set of computer code that enables a user to customize decision making criteria, said first set of computer code including:

computer code that enables a user to define features characteristic of a predetermined type of data;

computer code that enables a user to define one or more groups of settings, each of said groups of settings including:

a plurality of decision levels;

for each decision level at least one rule based on at least one of said

features; and

for each rule a criteria; and

computer code that enables a user to store said groups of settings; and

a second set of computer code that enables a computer to process data, said second

set of computer code including:

computer code that enables a user to select a stored group of settings of said

stored groups of settings;

computer code that receives data of said predetermined type to be

processed, said data having values corresponding to said features;

computer code that, based on said selected group of settings, compares said

values with said rules according to said criteria; and

computer code that outputs a conclusion based on said comparison.

46.   (Previously Presented) A software program in accordance with claim 45,
wherein said first set of computer code further comprises, for each of said groups of
settings, computer code that enables a user to designate for each decision level a quantity
of rules effective to influence a result for that level.

47.   (Previously Presented) A software program in accordance with claim 45,
wherein said first set of computer code further comprises computer code that enables a
user to designate, for each decision level, whether that level represents a condition selected
from the group consisting of a technical fail condition, a necessary condition, a sufficient
condition, a contributing condition and a refer condition,

wherein said computer code that compares said values with said rules according to
said criteria performs a comparison of said values with said rules according to said criteria
for each decision level, and

wherein said computer code that outputs the conclusion does so based on a

combination of at least a comparison result for said necessary condition and a comparison result for said sufficient condition.

48.   (Previously Presented) A software program in accordance with claim 45,
wherein said computer code that compares said values with said rules according to said criteria performs a comparison of said values with said rules according to said criteria for each decision level, and
wherein said computer code that outputs the conclusion does so based on a combination of comparison results for at least two levels.

49.   (Previously Presented) A software program in accordance with claim 48, wherein said first set of computer code further comprises computer code that enables a user to designate for each decision level, a quantity of rules effective to influence a result for that level.

50.   (New) A method in accordance with claim 18, wherein said conclusion further comprises a recommendation based on the outcome of the diagnostic or screening test.

51.   (New) A method in accordance with claim 40, wherein said conclusion includes a recommendation based on the outcome of the test.